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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/040,413	01/09/2002	Hans Jorg Heger	1454.1214	2186

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EXAMINER

CHAWAN, SHEELA C

ART UNIT PAPER NUMBER

2625

DATE MAILED: 03/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/040,413

**Applicant(s)**

HEGER ET AL.

**Examiner**

Sheela C Chawan

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 09 January 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |                                                                                                                                                      |                                                                                         |
|------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                                                          | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                                                 | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>1/9/02, 12/4/03</u> . | 6) <input type="checkbox"/> Other: _____                                                |

## **DETAILED ACTION**

### ***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Drawings***

2. The Examiner has approved drawings filed on 1/9/02.

### ***Claim Rejections - 35 U.S.C. § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Faulkner (US. 5, 483,601).

As to claim 1, Faulkner discloses a method for authentication of a person by hand recognition (note, the phrase recognizing a person's identity is used in a general sense to cover two different but related concepts involving comparing currently obtained biometric feature data with previously stored biometric feature data: first using the person's hand, in this case to verify that he is the enrolled person that he claims to be; second using the person's hand to identify the person as one of the persons who are enrolled on the system, column 1, lines 15- 23, column 7, lines 24- 33, and also

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recognizing person's identity based on biometric measurements performed on the person's hand, column 16, lines 57- 59) comprising:

scanning a hand in a first position (fig 5, element 11 image capture device for capturing a portion of a person's hand including at least a plurality of fingers in spread positions fig 2, column 9, lines 9- 29- 33, corresponds to scanning first position, column 2, lines 61-63) and during transition to a second position (note, second position is the combination of image capture device element 11, and a second illumination in the form of structural light 21A, which is operative during the displacement image capture period and directing a structured light pattern on at least one of the fingers from a prearranged direction and substantially different from the image view direction corresponds to second position , column 2, lines 64- 67, column 3, lines 1-3, column 10, lines 35- 51, column 9, line 52 through column 10, line 6); and

carrying out hand recognition based on said scanning (note, recognizing is done based on two type of data the first hand bid data with hand enrollment data which are associated with hand feature data from both, column 2, lines 27- 67, column 3, lines 1- 19, column 12, lines 37- 67, column 15, lines 30-38).

As to claim 2, Faulkner discloses the method, further comprising detecting a living person based on scanning data obtained during said scanning of the transition (note, recognizing is done based on two type of data the first hand bid data with hand enrollment data which are associated with hand feature data from both, column 2, lines 27- 67, column 3, lines 1- 19, column 12, lines 37- 67, during capturing one set of

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images, a plurality of sets of images can be taken with the hand in slightly different position each time, column 12, lines 37-48).

As to claim 3, Faulkner discloses the method further comprising authenticating the living person only if it is recognized that the hand moves intrinsically during the transition (note, authenticating is done based on recognize data of hand enrollment operation cycle in which the person is enrolled on the system and as an alternative to capturing one set of images, a plurality of sets of images can be taken with the hand in slightly different position each time, column 12, lines 37-48).

As to claim 4, Faulkner discloses the method wherein said carrying out of the hand recognition is based on scanning data obtained by said scanning of the first (fig 5, element 11 image capture device for capturing a portion of a person's hand including at least a plurality of fingers in spread positions which corresponds to scanning first position, fig 2, column 2, lines 61-63, column 9, lines 9-33) and transition (column 2, lines 64- 67, column 3, lines 1-3, column 10, lines 35- 51); and

As to claim 5, Faulkner discloses the method wherein said carrying out of the hand recognition takes into account an amount of time needed for the transition (column 12, lines 37- 48, column 13, lines 50- 67, column 15, lines 30- 38).

As to claim 6, Faulkner discloses the method further comprising authenticating the living person only if a specific transition is recognized (note, recognizing is done based on two type of data the first hand bid data with hand enrollment data which are associated with hand feature data from both, (column 2, lines 27- 67, column 3, lines 1- 19, column 12, lines 37- 67, column 15, lines 30-38).

As to claim 7, Faulkner discloses the method further comprising scanning the hand in the second position (note, second position corresponds to the combination of image capture device element 11, and a second illumination in the form of structural light 21A, which is operative during the displacement image capture period and directing a structured light pattern on at least one of the fingers from a prearranged direction and substantially different from the image view direction, column 2, lines 64- 67, column 3, lines 1-3, column 10, lines 35- 51, column 9, line 52 through column 10, line 6, 35- 51), and

wherein said carrying out the hand recognition is further based on scanning data

Obtained for the second position (note, the phrase recognizing a person's identity is used in a general sense to cover two different but related concepts involving comparing currently obtained biometric feature data with previously stored biometric feature data: first using the person's hand, in this case to verify that he is the enrolled person that he claims to be; second using the person's hand to identify the person as one of the persons who are enrolled on the system, column 1, lines 15- 23, column 7, lines 24- 33, and also recognizing person's identity based on biometric measurements performed on the person's hand, column 16, lines 57- 59, recognizing is done based on two types of scanning data the first hand biometric data with hand enrollment data which are associated with hand feature data, column 2, lines 27- 67, column 3, lines 1- 19, column 12, lines 37- 67, column 15, lines 30-38).

As to claim 8, Faulkner discloses the method wherein the hand has to assume a different hand shape in the second position than in the first position (fig 5, element 11

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image capture device for capturing a portion of a person's hand including at least a plurality of fingers in spread positions fig 2, column 9, lines 9- 29- 33, corresponds to scanning first position, column 2, lines 61-63) and during transition to a second position (note, second position corresponds to the combination of image capture device element 11, and a second illumination in the form of structural light 21A, which is operative during the displacement image capture period and directing a structured light pattern on at least one of the fingers from a prearranged direction and substantially different from the image view direction , column 2, lines 64- 67, column 3, lines 1-3, column 10, lines 35- 51, column 9, line 52 through column 10, line 6, 35- 51, column 13, lines 50- 67).

Regarding claim 9, argument an analogous those presented for claim 1 are applicable to claim 9. Regarding a processor, coupled to said scanner, to perform hand recognition based on the scanning data as discloses by Faulkner as follow (fig 5, elements 31, 21A, 40, 30, and 60, all these elements corresponds to processor) coupled to said scanner (fig 1, element 11, corresponds to image capture), to perform hand recognition based on the scanning data (fig 5, element 40 hand enrollment data store and element 50 hand bid data store corresponds to scanning data to make a comparison and decision, column 8, lines 24- 65, column 9, lines 1- 18).

As to claim 10, see the rejection of claim 1 above.

***Other prior art cited***

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Smith et al., (US.6,128,003) discloses hand gesture recognition system and method.

Jocoy et al., (US.3, 804, 524) discloses apparatus for controlling fingerprint identification.

Imagawa et al., (US.6, 819, 782 B1) discloses device and method for recognizing hand shape, and position, and recording medium having program for carrying out the method recorded thereon.

Kondo (US. 4, 206, 441) discloses identification apparatus.

Freeman (US. 5, 454,043) discloses dynamic and static hand gesture recognition through low-level image analysis.



***Contact Information***

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sheela C Chawan whose telephone number is 703-305-4876. The examiner can normally be reached on Monday - Thursday 8 - 6.30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bhavesh Mehta can be reached on 703-308-5246. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Sheela Chawan  
Patent Examiner  
Group Art Unit 2625  
March 16, 2005